#### Parent Fact Sheet

# **Multiple CoA Carboxylase Deficiency (MCD)**

(Mul-ti-ple Co-A Car-Box-ill-ace De-fi-shen-see)

#### What is MCD?

Multiple CoA Carboxylase Deficiency (MCD) is a metabolic disorder. This means the body has a chemical imbalance. MCD is a condition in which the body cannot process the vitamin biotin properly. Biotin is a type of vitamin B. Biotin is needed for the body to grow and develop. Biotin is good for healthy hair and skin. It is also helps maintain the reproductive organs.

## What type of problems occurs with MCD?

A baby who has this condition may develop poor muscle tone, hair loss, and skin rashes. If untreated, this condition can lead to hearing loss and mental retardation. Early diagnosis and treatment will help prevent these problems.

## What is the chance my baby will have MCD?

This condition occurs in less than 1 in every 100,000 births. Babies born with this condition have a changed gene from each parent. A person who has one changed gene is called a carrier. A person who is a carrier does not have symptoms. If both parents are carriers, either parent can pass on the changed gene to their baby. If both parents pass on the changed gene, the baby will have the condition. If both parents are carriers, for each pregnancy:

There is a 25% chance that the baby will be born with this condition. •

There is a 50% chance that the baby will be a carrier for this condition.

There is a 25% chance that the baby will not be born with this condition and will not be a carrier.

### What is the treatment of MCD?

The treatment of this condition is simple. The treatment is daily doses of the vitamin biotin. Your baby's metabolic doctor will help you make sure that your baby gets the right diet and medical care.

### Where in Virginia can I take my baby for care?

Please speak to your baby's pediatrician about obtaining a referral to a pediatric metabolic specialist in your area. If you want to know more about this condition, please contact Virginia Newborn Screening Services, Virginia Department of Health. The Web site is <a href="http://www.vahealth.org/gns">http://www.vahealth.org/gns</a>.



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